Laser 3000™

Therapy Unit

User Manual

INTRODUCTION

The Laserex Laser 3000™ is a highly versatile and compact laser therapy device that, under the guidance of a qualified Veterinarian, provides a simple method of treatment, delivering relief from many common pain conditions.

Because of its simple design and ease of operation, the Laser 3000™ Therapy Unit is ideal for use either in a clinic or out in the field.

What is Laser Therapy?

Laser Therapy is a method of treatment using a laser, and is well established in the areas of pain relief and rehabilitation of numerous injuries. The laser light penetrates tissue where it is absorbed by cells and effectively stimulates healing and relief of pain. It also induces an immediate analgesic effect at the treatment site.

Laser Therapy also offers a painless and drug-free form of treatment.

The Laser 3000™ provides significant advantages over conventional treatment techniques

- Pain Relief
- Accelerated Healing
- Reduction of Swelling and Inflammation
- Reduced Scar Formation
- Painless and Drug-Free Treatment

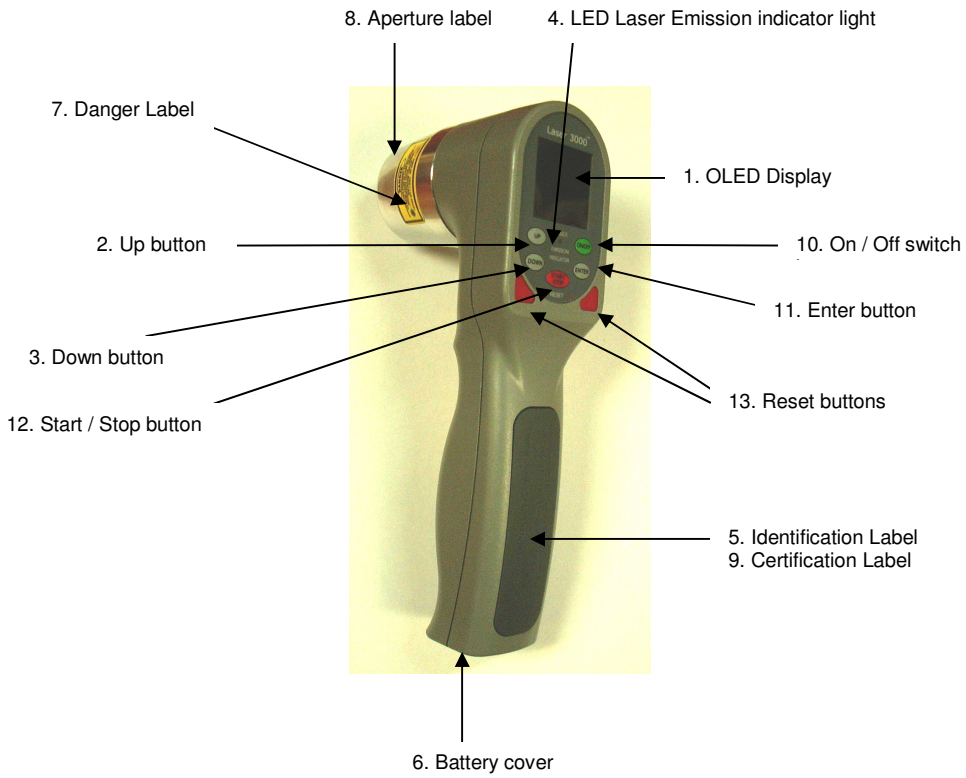
The Laser 3000™ is effective in providing help in the treatment of sprained and strained ligaments, tendon injuries and muscle soreness. These are just a few of the treatment possibilities.

LOCATION OF PARTS

1. OLED Display
2. UP button
3. DOWN button
4. LED laser emission indicator light
5. Identification label
6. Battery cover
7. Danger label
8. Aperture warning label
9. Certification label
10. On/Off switch
11. ENTER button
12. START / STOP button
13. Reset buttons

(See following page for diagram showing part & label locations)

LOCATION OF PARTS



LABELS

The Laser 3000™ comes with the following labels:

Certification label – This label states that Laserex certifies that the Laser 3000™ complies with 21CFR 1040.10 and 1040.11. This label appears on the front of the Laser 3000™.

Identification label – This label states the name and the location of the Manufacturer, Laserex Technologies Pty Ltd. This label appears on the front of the unit.

Warning logotype – The Danger label appears on the top of the unit and states the Max output of laser radiation and the emitted wavelength of the unit..

Aperture label – AVOID EXPOSURE – Laser radiation is emitted from this aperture. This label is for the aperture at the endcap and on top of the probe.

(See Page 5 for reproductions of labels on the Laser 3000™).

Labels

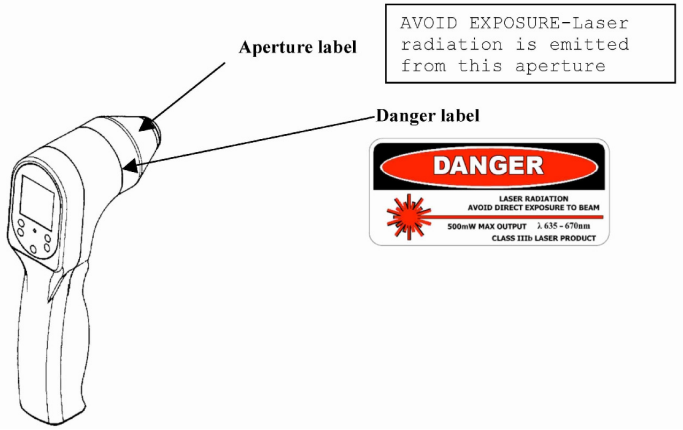
Certification label

The Laser 3000™ Class IIIb Laser Product
Complies with 21 CFR 1040.10 and 1040.11

Identification label

Laserex Technologies Pty Ltd
5A Corbett Court, Export Park
SA 5950 AUSTRALIA

Made in Australia
Web. www.laserex.net



INDICATORS AND CONTROLS

- Frequency selection (preset and variable) 0-5000 Hz and preset Nogier frequencies
- Setting required – dose to be delivered
- Time will be displayed to deliver the required dose
- Probe head recognition

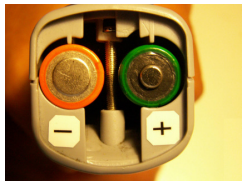
CAUTION: Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

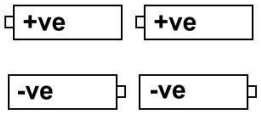
Operating Instructions

Charging Batteries. Please refer to the Powercell leaflet included with the Laser 3000™

1.Installation of batteries

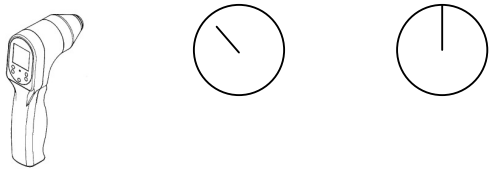
Remove the battery cover by turning the screw located on the bottom of the handpiece. Place 2 batteries inside each of the slots at the end of the probe of the unit as per the – and + symbols. Place the battery cover back onto the probe. (When you receive the Laser 3000™, the batteries will already be in the unit.)





2. Attaching the head

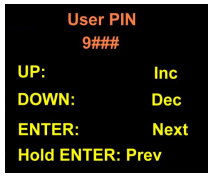
Attach the selected head by screwing it in a clockwise motion onto the hand piece until it has tightened into place. This is done by placing the head onto the hand piece at the 10 o'clock position by lining up the notch and turning it clockwise to the 12 o'clock position.



3. Operating the unit

Press the Green On / Off button for a few seconds. An audible beep will be heard. The following appears on the screen:

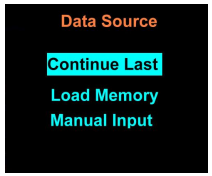
The following screen appears:



Explanation:

Press UP to increase the digit, DOWN to decrease. Press ENTER to go to the next screen. Hold ENTER for a few seconds to go back to the previous digit.

The PIN is factory set to 9999 by Laserex. The first 9 will appear on the screen. Press ENTER until the second asterisk becomes a 9, then press ENTER again until 9999 appear on the screen. After the 4th asterisk become a 9 the word OK will appear in yellow alongside ENTER on the screen. Press ENTER and 'correct' appears on the screen in green. If you make a mistake when entering a number, press ENTER for a few seconds and the digit returns back to an asterisk. Then input the correct digit. The next screen is:



Explanation:

- *Continue Last:* enters the previous treatment.
- *Load memory*: enters a treatment dosage stored in memory.
- *Manual Import:* allows one to manually enter the dosage

To enter any of these, press DOWN until the correct setting is highlighted and then press ENTER.

Continue Last:

From Data Source screen and with Continue Last highlighted in blue, press ENTER and the most recent treatment protocol will appear. Press ENTER with CONT highlighted in blue. 'Safety glasses must be worn' will appear in red along with an image of safety eyewear glasses. START appears in red along with the words Laser Ready! Place the laser safety eyewear on. Press the red START / STOP button to deliver the dosage. An audible beep will be heard whilst the dosage is being delivered.

Load Memory:

At the Data Source screen press DOWN so that Load Memory is highlighted in blue. Press ENTER. M:1 will be highlighted in blue. If there is more than one memory entered, press UP to select the desired treatment then press ENTER. OK will be highlighted and then press ENTER and the stored dosage appears on the screen. NEXT is highlighted and Laser Standby!

appears in green. Press ENTER and 'Safety glasses must be worn' appears in red along with an image of safety eyewear glasses. Laser Ready! Appears in yellow and START appears in red.

Press the red START / STOP button to deliver the dosage. An audible beep will be heard. Laser On! will appear in red on the screen.

Manual Import:

At the Data Source screen press DOWN so that Manual Import is highlighted in blue. The following screen appears:

Dosage Selection: Dose will be highlighted in blue. Press ENTER and the number of Joules are highlighted in orange. Press UP to increase the dosage or DOWN to decrease. When the correct dosage is entered, press ENTER.

Frequency Selection: Frequency (Freq) will be highlighted in blue and Continuous Wave (CW) will appear highlighted in orange. If you wish to use the Laser 3000 in CW press ENTER to move to the Interlock setting.

To change the frequency from CW to one of 7 programmed Nogier frequencies, press UP (with CW highlighted in blue) once to 73Hz, twice to 146Hz and so on. With the selected frequency highlighted in orange, press ENTER to the Interlock setting.

Manually inputting a Frequency:

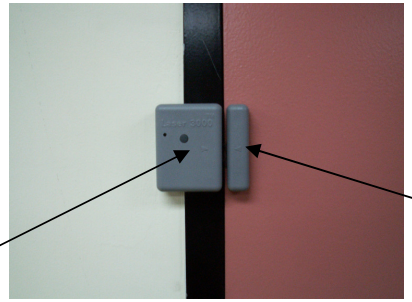
With Freq highlighted in orange, press the red START / STOP button so that CW is highlighted. Press UP to increase the frequency to the desired level.

Press UP for a few seconds to change the frequency quickly. Then with the frequency selected, press ENTER to continue.

Time: There is no need to enter the time. The Laser 3000™ calculates the time taken to deliver the dosage.

RF Interlock: After pressing ENTER, Interlock will be highlighted in blue. If the interlock is disabled, the letters DIS will appear on the screen in orange. Press ENTER and the following screen appears

As the Laser 3000™is a Class 3B laser, it requires a RF safety interlock. You will receive 2 of these with the unit. These can be placed either on the door or window of your office. See image below. If out in the field, no RF Interlock is required. Remember to *always* wear the laser safety eyewear provided when using the Laser 3000™ either indoors or outdoors. When using the Laser 3000™ indoors, at least one RF interlock must be enabled.



- Place double sided tape on the back of the RF interlock
- Attach to door frame and door of room
- Make sure arrows are facing each other

Press UP until INT 1 is highlighted, then press ENTER and EN (enabled) appears. Repeat the above until INT 2 is also enabled. If you are only using one RF Interlock, make sure that at least one of the Interlocks is enabled. If only one Interlock is enabled, say INT 1, press DOWN. INT 2 will appear as DIS. OK will then appear, highlighted in blue. Press ENTER. NEXT will appear highlighted in blue. Press ENTER. Laser Standby! will appear in green. CONT will be highlighted in blue, press ENTER and an image of laser safety eyewear appears along with the words 'Safety glasses must be worn' appearing in red. The next screen states:

START will appear in red.

It is now advisable to have the laser ready at the position where the subject is to receive treatment. Press the red START / STOP button and the Laser 3000™delivers the requested dosage. An audible beep will be heard and the Laser Emission indicator button on the front of the unit will be flashing in green. A timer will appear indicating the amount of time left for treatment. The Laser 3000™ will countdown the treatment time. The minutes and seconds left will appear in orange text on the screen. The words Laser ON! will be in red on the screen.

Repeating a dosage:
Upon completion of the treatment, a long beep will be heard, followed by the words Laser Standby! in green on the screen. NEXT will be highlighted in blue. Press ENTER, an image of laser safety eyewear appears along with the words 'Safety glasses must be worn' in red. Then press the START / STOP button. START will be highlighted in red. The same dosage will be delivered.

Storing a Treatment in Memory:

After entering the dosage, frequency and interlock, press ENTER. NEXT will be highlighted, then press DOWN until SAVE is highlighted in blue. Press ENTER and the following screen appears:

Press ENTER when M1 is highlighted. The Laser 3000™allows for the storing of 14 settings in memory. When OK is highlighted, press ENTER and it will be stored in memory. In future, when the stored dosage is required, press ENTER at Load Memory at the Date Source screen.

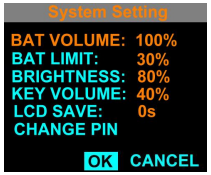
If you arrive at the above screen and notice that an error was made press DOWN so that CANCEL appears highlighted in blue. Press ENTER and you will be returned to the previous menu. Press UP until you reach the variable that requires changing, then proceed with the above procedure.

Incorrect Command entered:

If an error is made, at the Laser Standby! screen, press DOWN so that PREV is highlighted in blue to return to the Data Source screen. Then select the correct setting.

System Setting Change PIN:

After selecting the Manual Input, press ENTER until NEXT is highlighted, then press DOWN twice until the arrow after SAVE is highlighted in blue. Press ENTER. System setting appears providing information on:



To change any of the settings, press UP until the desired function is highlighted in blue. For example, to change the PIN, press UP until CHANGE PIN is highlighted. Press ENTER and follow the instructions. To change other settings, press UP to select the setting highlighted in blue. Then press ENTER to highlight the % in orange. Press UP to increase the value or DOWN to decrease.

Stopping the unit:

If at any time you wish to stop the treatment, press the red START / STOP button. The following will appear on the screen:

You can then restart the treatment. CONT will be highlighted in blue. Press ENTER, an image of the laser safety eyewear will appear, then press the red START / STOP button.

In case of emergency, press the 2 restart buttons (see diagram) simultaneously and the Laser 3000™will switch off.

Changing a Dosage:

After completing a treatment and you wish to change the dosage

Press UP so that PREV is highlighted and then press ENTER. Select Manual input and ENTER the appropriate settings.

No Head Attached:

If no head is attached to the Laser 3000™, the following will appear on the screen:

Press Enter with OK highlighted. The next screen will indicate the following:

The Laser 3000™ should be switched off and the head re-attached. DO NOT detach the head whilst the unit is functioning or turned on.

Flat Battery:

If the battery is flat, the following will image appear on the screen:

It is recommended to stop treatment and recharge the batteries as soon as possible.

Interlock

If the interlock is interrupted eg a door where the interlock is attached is opened, the Laser 3000™will switch off and the above screen will appear. Ensure that the interlock is operational, then press OK to continue.

Safe Use of the Laser 3000™

The Laser 3000™ is a Class IIIB (3B) laser product that is potentially harmful to the human eyes. It is strongly recommended that laser safety glasses provided with the unit are worn during operation.

Laser Emission Indicator:

When the Laser 3000™is operating, the laser emission indicator button will be flashing green (see diagram)
CONCLUDING TREATMENT

Once the treatment is completed and the unit has reached its preset dosage, the laser will stop operating and the laser emission indicator will go out. At this stage, a beep will be audible.

If the Laser 3000™ is not to be used for an extended period of time, remove the batteries and place the unit in its carrying case.

This will prevent the possibility of battery leakage and protect the unit form damage.

CARE AND MAINTENANCE

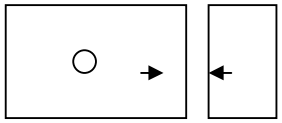
The Laser 3000™ is a very sturdy device that is supplied with its own carry case. However, like any other electronic product, it requires proper care and handling. We recommend the following:

- Never try to disassemble the device.
- **Do Not** drop the device or handle it roughly.
- **Do Not** immerse the device in water or liquids.
- Any servicing of the device must be done through an Authorised Dealer. If you have any queries, refer them to Laserex Technologies.

WARNINGS

- **Do Not** use the Laser 3000™ directly over the eyes.
- **Do Not** shine the laser beam into the eyes.
- Keep the Laser 3000™ out of the reach of children.

TESTING THE BATTERY



With the RF interlock attached to the door frame and the 2 arrows aligned (as shown above), press the button. If the red LED switches on, the battery is in good condition.

Laser 3000™ SPECIFICATIONS

LASER Type	Laser Diode
Wavelengths Available:	635nm, 650nm, 660nm, 785nm, 808nm, 830nm, 904nm
Power:	5mW-450mW (depending Upon diode used)
Pulse Repetition Mode:	Continuous Wave and preset Nogier frequencies
Battery Type:	4 x AA NiMH rechargeable batteries
Battery Life:	Approximately 2 hours continuous
Dimensions:	250mm x 90mm x 50mm
Weight:	340 grams including batteries

WARRANTY TERMS AND CONDITIONS

Your Laser 3000™ Therapy Unit was produced under the highest standards of quality control. Every effort has been made to ensure that the device reaches you in good working condition. However, if the device should malfunction due to defective materials and / or workmanship, it is warranted for 24 months from the date of purchase providing:

- It is returned pre-paid to Laserex or an Authorised Dealer along with proof of purchase.
- It is not misused, adjusted or serviced by any person other than a Laserex Technologies Service Agent
- It is used in accordance with the Laser 3000™ instructions issued with this product and is used in the manner intended.

Laserex Technologies and its Authorised Dealers will not be liable for any consequential loss or damage whatsoever or howsoever arising.

Address of Manufacturer:

Laserex Technologies Pty Ltd
5A Corbett Court
Export Park SA 5950
Australia

Telephone: +61 8 8234 3199
Facsimile: +61 8 8234 3699

Web: www.laser3000.net
E-mail: sales@laser3000.net

Certified System ™
Quality
ISO 9001
SAI GLOBAL

Your Authorised Dealer is:

CONTENTS	Page
Introduction	1
Location of Parts	2-3
Labels	4-5
Indicators and Controls	6
Caution Statement	6
Operating Instructions	6
Operating the unit	7-15
Care and Maintenance	16
Warnings	16
Testing the RF Battery	16
Specifications	17
Warranty Terms and Conditions	18
Address of Manufacturer	19